

National Park Service

National Park Service
U.S. Department of the Interior



Jean Lafitte

National Historical Park and Preserve
Louisiana



Environmental Assessment for Replacing Hurricane Katrina- Destroyed Chalmette Visitor Center

June 2008

Environmental Assessment for Replacing Hurricane Katrina-Destroyed Chalmette Visitor Center

Summary

This project proposes to build a new Visitor Center (VC) to replace the building heavily damaged during Hurricane Katrina and demolished thereafter. This project will provide a 3,500 square foot replacement facility to meet park and visitor needs.

The new VC will be in the existing turf island where the previous VC foundation and the current temporary modular VC are located. This site is a high point of ground, about ten feet above sea level, and is directly south of the Monument at the apex of the Monument Road. The proposed building meets flood plain elevation requirements. The existing parking lot south of this island, existing sidewalks and curb ramps for accessible parking and the existing comfort station south of the parking lot will remain. This center will remove the temporary modular building purchased as an emergency post-Hurricane Katrina Visitor Contact Station, as well as the former VC's foundations beneath.

The proposed VC is designed to incorporate vernacular architectural features that reflect the historical significance of the site and are complimentary to the character, setting and context of the Chalmette Monument and Battlefield landscape, as well as to the history of the Rodriguez tract. It will be oriented to provide views to the Battlefield while being sited along the strong axis established by the Monument and Monument Road.

The building will contain a visitor services and orientation area, exhibits, bookstore, storage, a staff restroom/office, a multi-purpose area and viewing porch/platform overlooking the battlefield.

In order to identify the best combination of architectural ideas, space utilization plans and visitor experiences, a Value Analysis (VA) Study was conducted November 5-7, 2007. The VA workshop focused on selecting a preferred alternative using Choosing By Advantages (CBA) processes and Life Cycle Costing (LCC) for the visitor center building and exhibit designs. The final VA report is on file for reference.

The proposed building site was surveyed prior to the construction of the original VC in 1986 and found to be post-battle fill material dating from the time of Monument Road construction in the early twentieth century. Onsite monitoring will be provided during ground disturbing activities.

In case of inadvertent archeological discoveries the project will be stopped and the park will consult with staff at the Southeast Archaeological Center, archaeological advisor to the park.

This is a Katrina Hurricane Damage recovery project designed in accordance with the Facilities Condition Assessments conducted as a result of the storm, August 29, 2005.

Evaluated in this Environmental Assessment are three alternatives: a no action alternative and two action alternatives. The action alternatives involve: 1) replacing the VC on the original footprint, and 2) replacing the VC on a new expanded footprint and new adjacent location.

This Environmental Assessment has been prepared in compliance with the National Environmental Policy Act to provide the decision-making framework that 1) analyzes a reasonable range of alternatives to meet project objectives and 2) evaluates the potential issues and impacts to the Chalmette Battlefield's resources and values. No major impacts and/or resource impairment is anticipated as a result of this project. Internal and public scoping was conducted to assist with the development of this document and the alternatives.

Public Comment

If you wish to comment on the Environmental Assessment, you may mail comments to the name and address below or enter them online at the National Park Service Planning, Environment, and Public Comment website (<http://parkplanning.nps.gov/>). This Environmental Assessment will be on public review for 30 days. Please note that names and addresses of people who comment become part of the public record. Before including your address, phone number, e-mail address, or other personal identifying information in your comment, you should be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. While you can ask us in your comment to withhold your personal identifying information from public review, we cannot guarantee that we would be able to do so. We would make all submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organization or businesses available for public inspection in their entirety.

You can mail comments to:

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You can post online comments to:

David Luchsinger
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Jean Lafitte National Historical Park and Preserve

www.nps.gov/jela

Purpose and Need

INTRODUCTION

The National Environmental Policy Act (NEPA) requires that environmental documents discuss the environmental impacts of a proposed federal action, feasible alternatives to that action, and any adverse environmental effects that cannot be avoided if a proposed action is implemented. In this case the proposed federal action would be the replacement of the former Chalmette Visitor Center (VC), heavily damaged by Hurricane Katrina and subsequently demolished. This document analyzes the environmental impacts of implementing the two alternatives and the no action alternative on cultural resources, natural resources, the visitor experience, park operations, and the socioeconomic environment. The analysis is the basis for comparing the beneficial and adverse effects of implementing the alternatives.

Impact analysis discussions are organized by impact topic and then by alternative under each topic. Each alternative discussion also describes cumulative impacts and presents a conclusion. Within this document is a brief discussion of unavoidable adverse impacts, irreversible and irretrievable commitments of resources, the relationship of short term uses of the environment and the maintenance and enhancement of long term productivity.

PURPOSE OF AND NEED FOR ACTION

The purpose of this Environmental Assessment (EA) is to present and evaluate alternatives for the replacement of the Chalmette VC damaged by Hurricane Katrina on August 29, 2007 and subsequently replaced. The range of alternatives examined are:

- **Alternative A—No Action**
- **Alternative B—Replace VC on the former footprint**
- **Alternative C—Replace VC on a new expanded footprint and adjacent location, the NPS and Environmentally Preferred Alternative**

In the no action alternative the temporary modular building which was installed to replace the demolished VC and provide emergency visitor services would remain until it was no longer usable and then be removed. The second alternative examined would have replaced the old VC with a building on the exact footprint of the 1400 square foot (sf) VC that was destroyed by the hurricane's storm surge (Figure 1).



Figure 1. Illustration depicting Alternative B – Constructing a 1400 sf VC on the exact footprint of the previously destroyed VC.

The third alternative would replace the VC with a 3500 sf VC at a new adjacent location within the original circle (Figure 2).



Figure 2. Illustration depicting Alternative C – Constructing a 3500 sf VC.

The size and location of the VC proposed in Alternative C was chosen by park staff and professional consultants after a process of public scoping (during scoping for the Chalmette General Management Plan (GMP) Amendment now underway); informal consultation with the State Historic Preservation Office about appropriate location and design; discussions with professional staff in the National Park Service (NPS) Southeast Regional Office and Denver Service Center about impacts to the cultural landscape and historic fabric of the National Register District; input from park interpretation and maintenance staff; results of using the NPS Facility Calculator; and a Value Analysis (VA) Study conducted November 5-7, 2007 using Choosing By Advantages (CBA) processes and Life Cycle Costing (LCC) for building and exhibit designs.

Other Alternatives Considered but Not Examined in Detail

A complete relocation of the VC away from the present location was not fully examined as an alternative because such a project would have been outside the scope and the purpose for which Congress provided funding—as storm damage replacement. Any other location would have required utility installation, new parking, and new vehicular access, all of which could not be funded from the existing appropriation. In addition, the ongoing Chalmette GMP process had already narrowed the range of possible sites for a future VC to the chosen location.

DESCRIPTION OF AND SIGNIFICANCE OF THE PARK

Purpose and Significance of the Chalmette Unit

The Chalmette Unit of Jean Lafitte National Historical Park and Preserve includes the Chalmette Battlefield and Chalmette National Cemetery and commemorates the lives and stories of the American and British forces who participated in the Battle of New Orleans in 1815. The legacy of the American victory and its contribution to American independence is honored through the interpretation of historic and contemporary cultural resources at the Chalmette Battlefield and Chalmette National Cemetery.

The purpose of Chalmette Battlefield and Chalmette National Cemetery is:

- to honor and commemorate those who fought and died to preserve American independence at the Battle of New Orleans
- to care for and manage the archeological artifacts, historic structures, and other objects of historic and scientific importance for the benefit of future generations through preservation, interpretation, education, and inspiration

The Chalmette Battlefield and Chalmette National Cemetery are significant because they:

- contain the archeological and cultural landscape remnants of one of the most significant battlefields of the War of 1812
- commemorate a dramatic turning point in the development of the United States where European influence on the Mississippi River was ended and the path for western migration and settlement opened
- are associated with the military actions of Andrew Jackson who, as a result of his stunning victory at Chalmette, became a national hero and began his political journey to the 7th U.S. Presidency
- portray the diversity of the American forces which delivered a military defeat to the British at the Battle of New Orleans
- honor and memorialize the military service of over 10 generations of Americans

Description of the Chalmette Unit

Chalmette is a unit of the larger Jean Lafitte National Historical Park and Preserve, one of six separate geographic sites managed by the park (Figure 2). The unit is located in Chalmette, Louisiana, approximately six miles southeast of downtown New Orleans, in a highly industrialized corridor along the east bank of the Mississippi River. It is bounded to the south by the Mississippi River. To the north, an approximately 200-foot wide strip—containing the Norfolk Southern Railroad, an abandoned railroad embankment, one active and one abandoned gas line right-of-way—separates the park from the St. Bernard Highway (LA Highway 46). The St. Bernard Port, Harbor and Terminal District bounds the park to the east, and the Chalmette Slip, also owned by the port, bounds the park to the west. A sewage treatment facility, owned by St. Bernard Parish stands as a 1.5- acre in-holding at the park's southern end along the levee and River Road. Surrounding industrialization has eliminated the agricultural setting that existed at the time of the battle and has significantly changed the natural setting surrounding the preserved portion of the battlefield and cemetery.



Figure 3. Map of Jean Lafitte National Historical Park and Preserve sites.

Chalmette Battlefield, including the VC site near the Chalmette Monument, is the larger of two contiguous landscapes that comprise the 142.9-acre Chalmette Unit of Jean Lafitte National Historical Park and Preserve. The battlefield, a 125.6-acre commemorative and interpretive site, preserves a portion of the former agricultural landscape on which the Battle of New Orleans was fought. The adjacent 17.3-acre Chalmette National Cemetery occupies a portion of the historic battlefield landscape, but is distinct from the commemorative battlefield.

History of the Chalmette Unit

The Rodriguez estate, site of the American line during the Battle of New Orleans, was purchased by the State of Louisiana in 1855 for the purpose of erecting a monument to the American soldiers who had fought in the Battle of New Orleans. Chalmette Monument, a marble obelisk erected on the site between 1855 and 1909 represents an early manifestation of the sentiment which would produce the first military parks in the U.S. The Chalmette Monument was capped and completed in late 1908. On August 10, 1939, by act of Congress, the site was formally designated a National Historical Park and subsequently transferred to the administration of the National Park Service.

In 1978 Congress established Jean Lafitte National Historical Park and Preserve

“In order to preserve for the education, inspiration, and benefit of present and future generations significant examples of natural and historical resources of the Mississippi Delta region and to provide for their interpretation in such manner as to portray the development of cultural diversity in the region...”

The legislation incorporated Chalmette National Historical Park into Jean Lafitte as the Chalmette Unit, the most important historical resource managed by the new park with its broader mission.

Impact Topics Considered

Cultural Landscape

Chalmette contains and protects a portion of the land on which the Battle of New Orleans occurred. However, the battle was spread over a wider area than is currently contained within the existing park boundary. Within the site, various land parcels, each with its own distinctive history, have been assembled into the present landscape. Portions of the Rodriguez Plantation, where American forces built their defensive rampart, and the Chalmette Plantation, across which the British assault was conducted, comprise the present landscape. Elements not present during the Battle of New Orleans but added subsequently include the Chalmette Monument, providing a focal point on the Rodriguez property, and the NPS-reconstructed American rampart on the original line between the two

plantations. The historic but post-battle Malus-Beauregard House and the St. Bernard sewage treatment plant (behind a screen of trees), introduce elements unrelated to the story of the battle.

In the vicinity local land has shifted from agriculture to industrial, commercial and suburban development. Open views along the curve of the river and across the Chalmette plantation's agricultural fields that were strategically important to the battle have been blocked by industrial sprawl and wooded areas to the west of the park. But traces of battle era agricultural ditches, canals and roadbeds remain within the park boundary.

The Mississippi River shifted its course over time altering the riverfront. Since the battle the river has eroded approximately 200 ft of the southernmost edge of the battlefield (Risk 1999). The river is separated from the rest of the landscape by a flood protection levee and flood wall. Though a man-made levee was present at the time of the battle, the modern levee is considerably higher and wider, topped by a concrete floodwall and is now located about 200 feet north of its battle era alignment.

The Rodriguez Plantation property was altered by the development of the Chalmette Monument. A paved road runs perpendicular to the river from the twentieth century St. Bernard Highway entrance along the central axis of the pie shaped tract and divides to encircle the marble obelisk. A second traffic circle, with embedded parking and pullouts, encircles an island of turf on the river side of the monument, the location of the former VC and the present temporary VC modular building. A 1972 restroom flanks the parking lot off center and on the river side. Between the VC island and the river is a rectilinear stand of live oaks, some of which may date from the battle era or shortly thereafter, and may outline the site of original Rodriguez House, General Andrew Jackson's forward headquarters during the battle.

The layout of the Chalmette Monument gives the Rodriguez tract a commemorative formality, in contrast to the more natural landscape of the battle plain on the adjacent Chalmette tract.

SOCIOECONOMIC ENVIRONMENT

The socioeconomic environment in St. Bernard Parish and adjacent New Orleans was altered dramatically on August 29, 2005 when Hurricane Katrina struck Louisiana's coast. On September 24, 2005, the coast was hit again by Hurricane Rita. Initially 1.3 million Louisianans were displaced or evacuated as a result of the hurricanes. St. Bernard and adjacent portions of Orleans parish were completely inundated as a result of storm surge and levee or floodwall failure. Except for emergency personnel, all residents were evacuated. Residences and other structures were lost or damaged to the extent they were unlivable or non-functional. Changes to St. Bernard Parish as a result of the hurricanes provide insight into the region as a whole, including the adjacent Ninth Ward in New

Orleans. Both pre- and post-Katrina demographic data are presented here when available. Post-Katrina data are limited and being updated and expanded on a regular basis and could become outdated in a short period of time.

Pre-Katrina Demographics

Population in the St. Bernard Parish was 67,229 in 2000, 96 percent urban. Between 1990 and 2000 the population of St. Bernard Parish increased by only 0.01 percent. Age distribution for people living in St. Bernard Parish was approximately 26.1 percent age 0 to 17 years, 60.8 percent age 18 to 64 years, and 13.9 percent over age 65 years (U.S. Census 2000).

Post-Katrina Demographics

One year after Hurricane Katrina, the population of St. Bernard Parish was approximately 15,514 (Louisiana Recovery Authority 2006). Approximately one-third of the population relocated to more distant parishes or out-of state (Louisiana Recovery Authority 2006). The most current population data is represented by the number of households actively receiving mail. Prior to Hurricane Katrina, the number of households actively receiving mail in St. Bernard Parish was 25,604. As of November 2007, the number of households is 10,568 approximately 41 percent of the pre-Katrina number (GNOCDC 2008).

Prior to Hurricane Katrina, St. Bernard Parish had 1,051 employers in the second quarter of 2005. Post-Katrina the number of employers decreased to a low of 429 in the first quarter of 2006 but has since grown to approximately 525 in the last quarter of 2006; 616 had moved or closed after the hurricane but 73 have moved in or opened (GNOCDC 2008).

St. Bernard Parish had 15 public schools and 8 private schools open prior to Hurricane Katrina. As of December 2007, there are only five public and three private schools open (GNOCDC 2008).

Regional

The number of non-farm jobs in the New Orleans Metropolitan Statistical Area (MSA) decreased from 604,500 in July 2005 to a low of 425,800 jobs in October 2005 and has increased to approximately 510,300 jobs, as of November 2007. As of November 2007, the dominant source of employment in the New Orleans MSA was private (non-governmental) service-providing jobs rather than goods-producing as it had been prior to the hurricanes. Goods-producing employment has reached or exceeded pre-Katrina levels since May of 2007. A majority of the employment in the New Orleans MSA comes from education and health services, professional and business services as well as trade, transportation and utilities. Government employment (76,600) is still below pre-Katrina levels (101,400) (GNOCDC 2008).

Economic Contribution to the Community

As an individual entity, the unit contributes to the local economy by attracting visitors and has been a component of the tourism industry for St. Bernard Parish and New Orleans.

Park management is actively engaged with the local community. It continues to cooperate constructively on issues that are of interest and concern to the surrounding community and works to strengthen its relationship with volunteers, local government officials, and local cultural and natural heritage institutions. Since Hurricane Katrina, partnering and cooperation with community groups has been interrupted. The St. Bernard Parish Recovery Plan states the importance of the unit to the community for tourism and emphasizes the need to continue partnering with the Park (St. Bernard Parish 2007).

VISITOR USE AND EXPERIENCE

Chalmette received 65,020 visitors in 2007. Prior to Katrina, the park had 95,339 visitors in 2003, 87,914 in 2004, and 118,992 in 2005 prior to August 28 when the unit was closed by Hurricane Katrina. The method for calculating visitation was changed in 2005 to more accurately reflect true numbers by adding a method to count bus passengers. A conservative extrapolation of 2005 visitation for the months September to December would indicate that pre-hurricane visitation was probably averaging at least 150,000 per year, which means that in 2007 visitation had recovered to less than half of pre-hurricane levels, but was increasing. This is consistent with trends reported elsewhere in the New Orleans region.

In addition to non-local visitors interested in the battle and history of the site, other visitors use the 1.5-mile tour road for recreational walking, jogging and bike riding. Many recreational visitors are local residents who utilize the roads as paths before and after operational hours when vehicles are prohibited.

A commercially operated paddle wheel tour boat, the Creole Queen, docked daily or twice daily at the Chalmette Battlefield year round and provided a unique and scenic way to access to Chalmette Battlefield for visitors from New Orleans. Park staff met the arriving passengers and offered guided interpretive walks to interested visitors. Other boat passengers visited the museum or watched the film in the VC. About 30% of total unit visitation in 2005 arrived by river boat. Hurricane Katrina heavily damaged the tour boat landing and the Creole Queen has suspended operations.

For all of these reasons--return rates for local residents of St. Bernard Parish, the recovery trend for tourism generally in the New Orleans region, and the uncertainty about restoration of river boat service--estimating future visitation is problematic. The park therefore used intermediate visitation estimates in

projecting numbers in the facility calculator model to estimate needed space for the new VC.

NPS OPERATIONS

Prior to the storm, the battlefield, tour road, Malus-Beauregard House and National Cemetery were open daily throughout the year. VC hours of operation were from 9-5 daily. Rangers met tour boats and conducted formal programs on fixed schedules daily. Maintenance operations for grounds, roads, and buildings occurred daily. Since Hurricane Katrina, staffing has gradually increased as facilities and has come online and visitation has slowly recovered. The grounds and public restrooms are open Monday –Thursday from 7:00 am – 3:00 pm and Friday-Sunday from 9:00 am - 4:00 pm. The visitor center is open Friday-Sunday from 9:00 am– 4:00 pm. Vacant positions are being filled during 2008 to allow the visitor center to operate up to 7 days a week.

NPS interpretive staff provide interpretive programs to educate visitors and groups on the Battle of New Orleans and its significance to the War of 1812, American westward expansion, and the career of Andrew Jackson. Living history demonstrations are performed occasionally and special events, such as the Anniversary of the Commemoration of the Battle of New Orleans held each January, allow local and state organizations to be involved in the park's activities. Since Hurricane Katrina there has been no regularly scheduled programming; however, specially scheduled events like the anniversary were held in 2006, 2007, and 2008, and special tours are accommodated.

The temporary visitor center is open to the public from Friday through Sunday each week with 1-2 NPS staff on site. Artifacts and exhibits housed in the visitor center were retrieved by NPS curatorial staff and some were salvageable. Items are either in curatorial storage or in use in the temporary visitor center.

Currently, visitors have access to the temporary visitor center during hours of operations and the auto tour loop is available daily. The levee overlook and tour boat landing are closed to eliminate concerns of visitor safety until the area is restored and safe for the public.

Impact Topics Eliminated from Further Analysis

Archeological Resources

The first NPS sponsored archeological testing took place in 1957 by Francis H. Elmore. Additional archeological surveys took place between 1963 and 1998 using a variety of methodologies. These surveys uncovered a number of artifacts, earthwork remnants and landscape anomalies related not only to the Battle of New Orleans but to the land uses of the property before and after the battle.

The most recent archeological survey undertaken in October 2000 used a multi-disciplinary approach. Electronic projections of historic maps, shovel tests, metal detecting, excavations, ground penetrating radar, global positioning system (GPS) and geographic information system (GIS) mapping were all used in the investigations. The survey resulted in conclusive evidence confirming the location of the main British attack and artifacts from both the War of 1812 and the Civil War (Cornelison and Cooper 2002).

Archival research, ground testing, and compliance archeology during utility installations indicate that the traffic island adjacent to the monument where the VC is planned is comprised of above-grade fill material. In addition, surveys at several locations on the Monument (formerly Rodriguez) tract indicate that much of the surface was altered post-battle, possibly as the soil from the rampart on Line Jackson was spread to remove the earthen rampart. The probability of disturbance during construction of *in situ* artifacts is therefore quite low. Remediation for the possibility of archeological disturbance will be the same in either action alternative, therefore this topic has been eliminated from further analysis.

Historic Structures

The following listed sites and structures represent the significant known cultural resources within the boundaries of Chalmette. Specific information about each of these structures is summarized in the Historic Resource Study for Chalmette (Greene 1985).

- Rodriguez Canal
- Site of American entrenchments and artillery batteries.
- Site of Rodriguez Plantation complex.
- Site of British advance batteries of January 1, 1815.
- Site of British attacks of December 28, 1814; January 1, 1815; and January 8, 1815, including the sites of Centre Road and the several drainage ditches that traversed the field.
- Site of Confederate earthworks. (While the site of most of the entrenchments proper lies beyond the east wall of the national cemetery, part of the area of occupation of the works was within the present park boundary)
- Chalmette Monument
- Spotts Marker
- Chalmette National Cemetery
- Grand Army of the Republic (G.A.R.) Monument
- Malus-Beauregard House

Chalmette Monument

The Chalmette Monument is a 142 ft tall obelisk commemorating the American defenders who fought in the Battle of New Orleans. The monument is located

adjacent to the site of the visitor's center on the historic line of entrenchments occupied by Andrew Jackson's men during the battle in 1815. Construction of the monument began in 1855, was completed in 1908 and dedicated during the centennial celebration of the Battle of New Orleans in 1915.

Other Historic Features:

Chalmette National Cemetery

The Chalmette National Cemetery was established in 1864 as burial site for Union soldiers who died in Louisiana during the Civil War. It contains over 15,000 burials, including casualties and veterans of the Civil War, Spanish-American War, World War I and World War II, as well as a few casualties of the Vietnam War and several veterans of the War of 1812. The cemetery is connected to Chalmette Battlefield by walking paths and covers approximately 17 acres.

Malus-Beauregard House

The Malus-Beauregard House constructed approximately 18 years after the end of the War of 1812 (about 1836). It was constructed in the French Colonial Style of architecture of the ante-bellum period but was remodeled in the Greek Revival style. It represents the way of life and standard of living that characterized the sugar plantation owner in the New Orleans area (Greene 1985). The home passed through a variety of owners prior to being acquired by the state and transferred to NPS in 1949. The house was adaptively restored to its approximate appearance from 1856-1866 and served as the visitor center for the park in the late 1950s (Risk 1999). Flooding from Hurricane Katrina damaged the Malus-Beauregard House; however, the house maintained its structural integrity. Repairs and restoration are underway.

None of these historic structures will be affected by either action alternative, except in relation to the relationship of the new structure to the Chalmette Monument. That relationship is analyzed under Cultural Landscapes, therefore this topic has been eliminated from further analysis.

Floodplains

All federal agencies are required to avoid building in a 100-year floodplain unless no other practical alternative exists. NPS has adopted guidelines pursuant to Executive Order 11998 stating that NPS policy is to restore and preserve natural floodplain values and avoid environmental impacts associated with the occupation and modification of floodplains. The guidelines also require that, where practicable alternative exist, Class I action be avoided within a 100-year floodplain. Class I actions include the location or construction of administration, residential, warehouse, and maintenance buildings, non-excepted parking lots, or

other man-made features that by their nature entice or require individuals to occupy the site.

Based on the 1985 Flood Insurance Rate Map (FIRM) the VC is located in Zone B flood hazard area. Zone B is defined as the area between limits of the 100-year flood and 500-year flood; or areas protected by levees from base flood (FEMA 1985). The Chalmette Battlefield and National Cemetery are protected from the 100-year flood by both Mississippi River mainline levees and hurricane protection levees on the seaward face of developed areas. This levee system completely encircles the area, and a forced drainage pumping system removes rainwater and carries it over the levees. Hurricane Katrina is still being analyzed, but currently it is estimated to have been between a 100 year and 400 year event in St. Bernard Parish. Analyses completed by the United States Army Corps of Engineers (USACE) indicate that the current flood control system will not meet the standards for providing protection against the 100-year flood (FEMA 2006), but improvements to meet those standards are funded and scheduled for completion by June 1, 2011. New updated FIRMs are being developed as a result of analyses and the planned improvements to the levee system by USACE (FEMA 2006). Current advisory base flood elevation maps recommend that building in the unit's vicinity be constructed 3 ft above the highest existing adjacent grade (HEAG) at the building site (FEMA 2006). Either proposed VC will meet and exceed these flood elevation standards, therefore this topic has been eliminated from further analysis.

Water Resources

The Mississippi River is the only major hydrologic feature in the area. The project will have no impact on this resource.

Coastal Zone

The Federal Coastal Zone Management Act gives Louisiana the authority to determine whether activities of governmental agencies are consistent with the Louisiana Coastal Resources Program. The State Coastal Zone Management program classifies the battlefield area as fast-lands which are exempt from Coastal Zone permitting and Federal consistency requirements.

Soils

Soils at the site are elevated fill. No natural soil layers will be disturbed by the project.

Wetlands

A jurisdictional determination by the USACE was conducted at Chalmette in 2004. No jurisdictional wetlands will be impacted by the project.

In addition to the USACE wetlands, the NPS defines wetlands as vegetated areas that are flooded or saturated for a duration of time sufficient to allow development of **at least one** of the three wetland indicators described in the 1987 Corps of Engineers Wetland Delineation Manual (Environmental Laboratory 1987). The project site contains none of the three wetland indicators defined in NPS *Director's Order #77-1: Wetland Protection* and *Procedural Manual #77-1: Wetland Protection*.

Vegetation

The vegetation at the project site is mowed grass. No impacts to natural vegetation assemblies will occur as a result of the project.

Wildlife

Chalmette is maintained by mowing and bush-hogging with small areas of woods that act primarily as a visual buffer from the surrounding industrial developments. Both the battlefield proper and the wooded buffers provide habitat for a variety of organisms. The project will have no impact on these resources.

Disturbance to native wildlife will be minimal or non-existent as a result of the project.

Air Quality

Under the NPS 1916 Organic Act and the 1963 Clean Air Act, the park has the responsibility to protect air quality. The expected impacts of this project on air quality would be negligible. Increases in vehicle and equipment exhaust and emissions would occur on a temporary basis during construction. Increased electrical usage for the larger VC would be partially offset by adoption of Best Management Practices (BMPs) for lighting, insulation, and air cooling and heating systems. Due to the project location in an industrial district and ambient environmental conditions, these fumes would be a negligible addition. Based on these factors, air quality was dismissed as an impact topic from this analysis.

Ethnographic Resources

The Fazendeville Community

An African-American residential community known as Fazendeville, founded during the Reconstruction era, existed from 1867 to 1964 in the middle of the battlefield. The land was purchased by NPS in 1964. All physical evidence of the historic community was removed; however, the road trace remains. The site holds historic, cultural and ethnographic significance (Greene 1985). Only a road trace marks the site. In 1999, the NPS initiated an ongoing oral history project on the Fazendeville Community. Community leaders have been notified through the

Section 106 process. This project will have no effect on the Fazendeville Community site.

American Indian Tribes

NPS maintains a consultative relationship with the Choctaw tribes, including the Mississippi Band of Choctaw Indians, the Jena Band of Choctaw Indians, and the Choctaw Nation of Oklahoma. Choctaw Indians were American allies and participated in the Battle of New Orleans. In addition, NPS also maintains a consultative relationship with the Chitimacha Tribe of Louisiana for all matters concerning park resources in the lower Mississippi River delta region. The tribes have been consulted through the Section 106 process and no comments were received.

Environmental Justice

Executive Order 12898, *General Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* requires all federal agencies to address the effects of policies on minorities and low-income populations and communities. None of the management alternatives would have disproportionate effects on minorities or low-income populations as defined by the U.S. Environmental Protection Agency's 1996 guidance on environmental justice.

Indian Trust Resources

Indian trust assets are owned by American Indians but are held in trust by the United States. Secretarial Order 3175 *Departmental Responsibility for Indian Trust Resources* requires that any anticipated impacts to Indian Trust resources from a proposed project or action by U.S. Department of the Interior agencies must be explicitly addressed in environmental documents. According to the park Cultural Resource Specialist, Indian trust assets do not occur within the park and would not be affected by any alternatives; therefore, this topic was dismissed.

Museum Collections

According to Directors Order #28: *Cultural Resource Management (Ch. 9: Management of Museum Objects)*, the NPS defines a museum object as "a material thing possessing functional, aesthetic, cultural, symbolic, and/or scientific value, usually movable by nature or design. Museum objects include prehistoric and historic objects, artifacts, works of art, archival material, and natural history specimens that are part of a museum collection." The National Historic Preservation Act, 36 CFR 800, Archaeological Resources Protection Act, American Antiquities Act, Archaeological and Historic Preservation Act, Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation, Director's Order #28: *Cultural Resource Management* and NPS *Management Policies 2006* (NPS 2006) guide the analysis of effects on museum collections under NEPA. Museum items will be used in the display for the new

VC, making them available for public viewing. The parks museum curator is the custodian for all items which include historical objects, archives, and biological specimens. The proposed project would not impact museum collections as no curatorial facilities would be disturbed nor would items be added or removed from the park's collection; therefore, this topic was dismissed.

Prime and Unique Farmland

The Council of Environmental Quality (1980) states that federal agencies must assess the effects of their actions on farmland soils classified by the U.S. Department of Agriculture's Natural Resource Conservation Service as prime farmlands or unique farmlands. Prime farmland defined as land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and that is available for these uses. Unique farmland is land other than prime farmland that is used for the production of specific high value food and fiber crops, such as fruits, vegetables and nuts.

Within the project area, there are lands designated as prime farmlands (U.S. Department of Agriculture 2004). The building site has not been in agricultural production since the middle of the 19th century. Therefore, the topic of prime and unique farmlands has been dismissed from further consideration.

Soundscape

As directed by NPS *Management Policies 2006* and Director's Order #47: *Sound Preservation and Noise Management*, the NPS would preserve, to the greatest extent possible, the natural soundscapes of parks. Noise produced by the actions proposed in this project during construction would be temporary in nature and would not be at levels higher than those produced by adjacent industrial activities at the Chalmette Slip. The frequency, duration, and magnitude would not exceed those already taking place by park staff and visitors during maintenance and recreational activities. The negligible and temporary interruption of natural sounds caused by this project resulted in the dismissal of this topic from further analysis.

Threatened and Endangered Species

The Endangered Species Act of 1973 requires examination of impacts on all federally-listed threatened, endangered, and candidate species. Section 7 of the Endangered Species Act requires all federal agencies to consult with the U.S. Fish and Wildlife Service (or designated representative) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats. In addition, the NPS *Management Policies 2006* and Director's Order #77: *Natural Resources Protection* requires the NPS to examine the impacts on federal candidate species, as well as state-listed threatened, endangered, candidate, rare, declining, and sensitive wildlife and vegetation species. According to park staff

and recent biological inventories, no threatened or endangered species reside in the proposed project area.

No threatened and endangered species reside in the project area or would be impacted by the project activities; therefore, this topic was dismissed from further evaluation.

ENVIRONMENTAL CONSEQUENCES

INTRODUCTION

The National Environmental Policy Act (NEPA) requires that environmental documents discuss the environmental impacts of a proposed federal action, feasible alternatives to that action, and any adverse environmental effects that cannot be avoided if a proposed action is implemented. In this case the proposed federal action would be the replacement of the Chalmette VC. This section analyzes the environmental impacts of implementing the two alternatives and the no action alternative on the cultural landscape, the socioeconomic environment, visitor use and experience, and NPS operations. The analysis is the basis for comparing the beneficial and adverse effects of implementing the alternatives.

Impact analysis discussions are organized by impact topic and then by alternative under each topic. Each alternative discussion also describes cumulative impacts and presents a conclusion. At the end of the section there is a brief discussion of unavoidable adverse impacts, irreversible and irretrievable commitments of resources, the relationship of short term uses of the environment and the maintenance and enhancement of long term productivity.

CUMULATIVE IMPACT ANALYSIS

A cumulative impact is described in the Council on Environmental Quality's regulation 1508.7 as follows:

Cumulative impacts are incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other action. Cumulative impacts can result from individually minor, but collectively significant, actions taking place over a period of time.

Potential cumulative impacts at or in the vicinity of the site would involve future NPS actions. These actions are evaluated in conjunction with the impacts of each alternative to determine if they would have any cumulative effects on a particular natural, cultural, or socioeconomic resource or visitor use.

Past Actions

In the 1982 GMP/DCP for Jean Lafitte National Historical Park and Preserve, an area slightly south of the existing comfort station was identified as suitable for a new visitor center to replace the VC located in the Malus-Beauregard House. Prior to construction, however, preliminary archeological investigations at the recommended site uncovered buried artifacts associated with the Rodriguez Estate. After analysis of existing alternatives, the site of the pre-Katrina VC was chosen on the traffic island. This site was chosen because it was centrally located for visitors, provided pedestrian access to the Monument, the reconstructed American Rampart, the Malus-Beauregard House, the picnic area in the Rodriguez oaks, the existing parking and restroom building, and was located at the nexus formed by the terminus of the Monument Road and the beginning of the battlefield tour loop. From the standpoint of resource impact, the site would entail no disturbance of archeological resources, and was appropriate to the historic land use of the Rodriguez tract and commemorative landscape established by the presence of the Monument and the Monument Road.

In 2003 NPS embarked on an Amendment for Chalmette to the park's 1995 GMP. One of the primary needs identified in preliminary scoping was to expand and improve the unit's visitor center facilities to a level appropriate to its visitation levels and the importance of the interpretive mission. Draft alternatives, including alternatives for replacing the existing VC with a new and larger VC, were undergoing review by the Southeast Regional Director when Hurricane Katrina struck. NPS suspended the GMP process in order to allow park staff and the community to concentrate on storm recovery. On August 1, 2007, the NPS and its contractors resumed development of the GMP.

Present Actions

On August 29, 2005 Hurricane Katrina overtopped and breached the levee and floodwall system protecting the Chalmette unit. A saline storm surge entered the building to a depth of over five feet. The floodwaters at first rapidly subsided, but remained pooled and trapped within the building for several days. NPS personnel were unable to return to the site and re-enter the building until September 11 2005, and the process of opening and air drying did not begin until October 2, 2005.

Analysis of the building's condition led to the conclusion that it was structurally unsound and continuing to deteriorate as a result of corrosion of steel structural components. Salvageable contents were removed and the structure was demolished, leaving only the concrete slab foundation.

In 2007, the park installed a modular building on the slab to serve as a temporary VC and office. Congress appropriated emergency storm damage funding for replacement of lost facilities, including the Chalmette VC, in November 2005. The purpose of this EA is to analyze the alternatives for the replacement of the storm-damaged VC.

Future Actions

Possible future actions at the proposed VC site presently contemplated in the GMP alternatives would involve alterations to the parking lot and road loop, and relocation of the restroom facilities to be closer to the new VC. The purpose of such changes would be to improve accessibility, visitor use and access, automotive and pedestrian flow patterns, and to modernize the 1972 restroom facilities. A relocation of the restroom would have the added benefit of removing it from atop an important archeological site discovered subsequent to its construction. All changes to parking and traffic lanes proposed in the draft GMP would result in a decrease in traffic and parking spaces in the immediate vicinity of the VC.

IMPAIRMENT OF PARK RESOURCES

In addition to determining the environmental consequences of implementing the preferred and other alternatives, the NPS Management Policies 2006 requires analysis of potential effects to determine whether or not proposed actions would impair park resources and values.

The fundamental purpose of the national park system, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park system resources and values. NPS managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adverse impacts on a park unit's resources and values. Although Congress has given the NPS the management discretion to allow certain impacts within a park unit when necessary and appropriate to fulfill the purposes of the park unit, that discretion is limited by the statutory requirement that the NPS must leave resources and values unimpaired unless a particular law directly and specifically provides otherwise.

The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of the park unit's resources and values, including the opportunities that otherwise would be present for the enjoyment of those resources or values (NPS 2006). An impact on any park unit's resource or value may constitute impairment.

An impact would be more likely to constitute impairment if it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park unit;
- key to the natural or cultural integrity of the park unit or to opportunities for enjoyment of the park unit; or
- identified as a goal in the park unit's GMP or other relevant NPS planning documents.

Impairment may result from NPS activities in managing the park unit, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park unit. A determination on impairment is made in the conclusion section in this document for each impact topic related to the park resources and values. An evaluation of impairment is not required for topics related to visitor use and experience (unless the impact is resource based), NPS operations, or the socioeconomic environment. When it is determined that an action(s) would have a moderate to major adverse effect, a justification for designating the impact as "non-impairment" is made. Impacts of only negligible or minor intensity are not considered to result in impairment.

METHODS AND ASSUMPTIONS FOR ANALYZING IMPACTS

The impact analysis and the conclusions in this EA are based on the review of existing literature and studies, information provided by experts in the NPS and other agencies and park staff insights and professional judgment.

Director's Order 12, "Conservation Planning, Environmental Impact Analysis, and Decision Making," presents an approach to identifying the duration (short or long term), type (adverse or beneficial), and intensity or magnitude (e.g., negligible, minor, moderate, or major) of the impact(s), and that approach has been used in this document. Direct and indirect effects caused by an action were considered in the analysis. Direct effects are caused by an action and occur at the same time and place as the action. Indirect effects are caused by the action and occur later in time or farther removed from the place, but are still reasonably foreseeable. The impacts of the action alternatives describe the difference between implementing the no-action alternative and implementing each of the action alternatives. To understand a complete "picture" of the impacts of implementing any of the action alternatives, the reader must also take into consideration the impacts that would occur under the no-action alternative.

Methodology

Potential impacts to cultural resources are explained in terms of type, context, duration, and intensity, which is consistent with the CEQ regulations. Analyses of potential impacts are intended to comply with the requirements of both the NEPA and Section 106 of the National Historic Preservation Act (NHPA).

In accordance with the Advisory Council on Historic Preservation's regulations implementing Section 106, impacts to cultural resources were identified and evaluated by:

1. Determining the Area of Potential Effects (APE);
2. Identifying cultural resources present in the APE that were either listed on or eligible for listing on the National Register of Historic Places (NRHP);
3. Applying the criteria of adverse effect to affected cultural resources listed on or eligible for listing on the NRHP; and
4. Considering ways to avoid, minimize, or mitigate adverse effects.

Under Advisory Council on Historic Preservation (ACHP) regulations, a determination of either *adverse effect* or *no adverse effect* must also be made for affected National Register eligible cultural resources. An *adverse effect* occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource, which qualifies it for inclusion on the NRHP, by diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association. Adverse effects also include reasonably foreseeable effects caused by the alternatives that would occur at a later time or that would be cumulative over the course of time. A determination of *no adverse effect* means that there is an effect, but the effect would not diminish in any way characteristics of a cultural resource that would qualify it for inclusion on the NRHP.

Definitions of Intensity Levels

Negligible:

Impact(s) is at the lowest levels of detection – barely perceptible and not measurable. For purposes of Section 106, the determination of effect would be no adverse effect.

Minor:

Adverse impact – impact would not affect the character-defining features of a National Register of Historic Places eligible or listed structure or building. For purposes of Section 106, the determination of effect would be no adverse effect.

Beneficial impact – stabilization/ preservation of character defining features in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. For purposes of Section 106, the determination of effect would be no adverse effect.

Moderate:

Adverse impact – impact would alter a character-defining feature(s) of the cultural resource but would not diminish the integrity of the resource to the extent that its National Register eligibility is jeopardized. For purposes of Section 106, the determination of effect would be no adverse effect.

Beneficial impact – rehabilitation of the cultural resource in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties. For purposes of Section 106, the determination of effect would be no adverse effect.

Major:

Adverse impact – impact would alter a character-defining feature(s) of the structure or building, diminishing the integrity of the resource to the extent that it is no longer eligible to be listed in the National Register. For purposes of Section 106, the determination of effect would be adverse effect.

Beneficial impact – restoration of a structure or building in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties. For purposes of Section 106, the determination of effect would be no adverse effect.

Cultural Landscape

Impacts from Implementing the No Action Alternative A

Under the no-action alternative, existing conditions would remain unchanged. An inappropriate modular building would remain onsite in the near term. The building would eventually deteriorate and need to be removed. However, given the realities of funding, institutional inertia, and continuing visitor and staff needs, the building would probably continue to be used long after its scheduled lifespan. Current management practices, policies, and park programs would continue to be implemented with no major changes from current levels.

Cumulative Impacts. There would be no major cumulative impacts in this alternative.

Conclusion. If the modular building is left in place indefinitely, the presence of a structure that is inappropriate to the landscape and the history of the site will have a ***Moderate, Long-term, Adverse Effect***. The cultural landscape could potentially be ***impaired***, at least until the building is removed. If the modular building were removed along with the remaining foundations, this alternative would have a ***Moderate, Long-term Beneficial Impact*** since the landscape would return to its pre-1984 condition. Under Section 106 there would be **No Adverse Effect**. Consequently, there is a potential for impairment of park resources or values related to the cultural landscape as a result of the implementation of Alternative A.

Impacts from Implementing Alternative B

The building constructed in this alternative would have the same physical relationship to the Monument and the landscape as the former VC. The design would be an improvement in terms of its historical appropriateness, since it would

more accurately reflect vernacular attributes than the former structure. However, any building on the site changes the historic character of the cultural landscape.

Cumulative Impacts. There would be no major cumulative impacts in this alternative.

Conclusion. If a more historically appropriate structure were built on the same footprint as the removed VC there would be a **Minor Long-term Adverse Impact** with a finding of **No Adverse Effect** under Section 106. Consequently, there would be no impairment of park resources or values related to the cultural landscape as a result of the implementation of Alternative B.

Impact from Implementing Alternative C

In this alternative a larger building would be constructed aligned with the central axis of the Rodriguez tract. The building would be cited to enhance the visual importance of the Monument. It would be designed with appropriate historical vernacular attributes, without attempting to look like a historical replica.

Cumulative Impacts. There would be no major cumulative impacts in this alternative.

Conclusion. Because the building would be larger, it might have more of an impact on the cultural landscape than Alternative B. Under this alternative, there is a potential for a **Moderate Long-term Adverse Impact** with a finding of **No Adverse Effect** under Section 106. Consequently, there would be no impairment of park resources or values related to the cultural landscape as a result of the implementation of Alternative C.

Impacts Common to all Alternatives

The NPS is preparing an Amendment to the General Management Plan for Chalmette. In public and stakeholder scoping meetings held in 2003 and 2004, the need for a larger VC emerged as a major concern of all stakeholder groups. Should no VC be constructed as part of the NPS hurricane recovery project which Congress authorized and financed with supplemental appropriations in November of 2005, then the General Management Plan process now underway would have to be modified to address this issue. During the planning phases of the GMP amendment, informal consultation with the State Historic Preservation Office and discussions with professional staff in the NPS Southeast Regional Office, as well as input from park interpretation and maintenance staff about appropriate location and design led the planning team to reject other proposed location for a new VC. It was determined that a location elsewhere on the battlefield would have adverse impacts to the cultural landscape and historic fabric of the National Register District. From an operational and educational standpoint, staff argued vigorously for retention of the current location on the traffic island. It is therefore likely that if the question were re-opened as part of GMP process, NPS would reach the same conclusion about appropriate design and location as in the present document. If Alternative B were chosen now, the GMP might propose expansion or relocation.

SOCIOECONOMIC ENVIRONMENT

Methodology

The NPS applied logic, experience, professional expertise, and professional judgment to analyze the impacts on the social and economic environment resulting from each alternative. Economic data, historic visitor use data, expected future visitor use, and future development of Chalmette were all considered in identifying, discussing, and evaluating expected impacts.

Intensity of Impact. Assessments of potential socioeconomic impacts for the action alternatives were based on comparisons between the no action alternative and each of the action alternatives. The following intensity definitions were used, and may refer to either **Positive** or **Negative** impacts:

Negligible — Effects on socioeconomic conditions would be at or below the level of detection. There would be no noticeable change in any defined socioeconomic indicators.

Minor — Effects on socioeconomic conditions would be slight but detectable.

Moderate — Effects on socioeconomic conditions would be readily apparent and result in changes to socioeconomic conditions on a local scale.

Major — Effects on socioeconomic conditions would be readily apparent, resulting in demonstrable changes to socioeconomic conditions in the region.

Cumulative Impacts Common to All Action Alternatives Including the No Action Alternative

Impacts to the regional economy would increase as recovery from Hurricanes Katrina and Rita continues. After being closed to the public after Hurricanes Katrina and Rita in late 2005, the temporary VC has been open to the public with a limited schedule of availability of staff and access to the temporary Visitor Center as well as programs. The loss of visitors traveling by tour boat from New Orleans after the hurricanes is assumed to be temporary. As many as 600 visitors a day came during the tour boat season and this level of visitation would be expected to return to pre-hurricane levels if the tour boat landing is restored and area tourism recovers. In all, it is assumed that the visitor experience at Chalmette will eventually return to pre-hurricane levels in the future and that staffing levels will return to similar pre-hurricane levels, and that thereafter the long term trend toward increasing visitation would resume.

The social and economic situation in St. Bernard Parish is affected by a combination of factors, including the presence of the unit. Prior to the hurricanes the livelihoods of service-related businesses in the New Orleans region relied to a large extent on the inflow of tourist dollars, especially restaurants and motels. As the region recovers the economy from tourism is expected to return to what it was prior to the hurricanes. St. Bernard Parish had less of a reliance on tourism largely depending on an industrial economic base, but the Chalmette Battlefield

was a major driver of the tourism part of its economy, and local government was intent on expanding its tourism market, using visitors to the Battlefield as the basis for that expansion.

Common to all alternatives would be that the celebrations of the bicentennial anniversary of the War of 1812 and the Battle of New Orleans, in 2012 and 2015 respectively, would result in an increase in visitation. It would be expected that the bicentennial celebrations would not only provide potential visitors with a destination for visiting but could also provide visitors already traveling to the region with an excuse to extend their visits in order to participate in special events and activities at and near the park. St. Bernard Parish and the New Orleans region would benefit from a short term increase in visitors requiring a variety of services including lodging, meals and other tourist opportunities. This would be a short term, moderate economic benefit to the local, regional and state economy. The nationwide celebration of the War of 1812 Bicentennial may increase interest in the Battlefield causing an increase in visitation for the future.

Consequences and Cumulative Impacts.

Visitation trends are difficult to project, but have been increasing with the recovery of the area's tourism infrastructure and the gradual resettlement of the area. The approach of the Battle of New Orleans bicentennial may also lead to an increase in interest and visitation. Increased visitation will lead to general wear and tear on facilities and grounds. These impacts on the site may have a minor, short-term adverse effect.

Impacts from Implementing the No Action Alternative A

Continued use of the temporary VC building would allow visitor services to continue on the present limited basis. Without a new full service VC, NPS would be limited in the variety of programs and interpretive opportunities that could be offered to visitors. In the short term, the effects on the local Socioeconomic Environment would be ***Moderate and Negative***. Eventually, the NPS would have to remove the building and the range of variety of programs and interpretive opportunities would be greatly reduced. The impact on the local tourism economy would be ***Major and Negative***.

Impacts from Implementing Alternative B

Replacement in kind of the old VC would allow the return of a pre-hurricane level of programs and interpretive opportunities. Because of limited space, the full range of these programs and opportunities would not be available, limiting potential future growth. The impact on the local tourism economy would be ***Moderate and Positive Long-term***.

Impact from Implementing Alternative C

Replacement of the old VC with a new building that is sized appropriately to the interpretive and educational mission of the unit, and that can meet future visitor demand, would have a ***Major and Positive Long-term*** effect.

Impacts Common to all Action Alternatives

The following proposed actions would impact socioeconomics and are common to all the action alternatives:

Common to both proposed action alternatives would be ***short-term moderate benefits*** to the local economy for the construction called for in the alternatives. The degree of construction and development proposed within each alternative would impact the local economy for the duration of the construction and provide benefits ranging from **Minor and Beneficial** in Alternative A to **Moderate and Beneficial** in Alternative C.

The number of visitors, average length of visit, and length of season could increase with the addition of increased interpretive and educational opportunities. In combination with an overall increase in visitation would be an increase in visitation by school groups and other groups interested in the War of 1812, the Battle of New Orleans and the significance of other historic uses of site. This would result in a ***long-term moderate benefit*** to the economy locally and regionally.

New Orleans and St. Bernard Parish businesses that rely on the tourist trade would receive a **long term minor** benefit through direct and indirect spending for tourist-related services.

Conclusion. All three alternatives would provide short to long-term minor to moderate benefits to the local socioeconomic environment. Consequently, there would be no impairment of park resources or values related to visitor use and experience as a result of the implementation of Alternative B.

VISITOR USE AND EXPERIENCE

Methodology

The analysis of potential effects of the alternatives on visitor use and experience is based on how visitor use and experiences would change with the addition or removal of certain facilities and the way management prescriptions were applied in the alternatives.

Impacts. Impacts were evaluated comparatively between alternatives, using the no action alternative as a baseline for comparison with each action alternative:

Minor —Changes in visitor use and/or experience would be slight but detectable and would not appreciably limit or enhance visitor experiences identified as fundamental to the national historic site's purpose and significance.

Moderate — Some characteristics of visitor use and/or experience would change, and many visitors would likely be aware of the effects associated with implementation of the alternative; some changes to experiences identified as fundamental to the national historic site's purpose and significance would be apparent.

Major — Multiple characteristics of visitor experience would change, including experiences identified as fundamental to the national historic site's purpose and significance; most visitors would be aware of the effects associated with implementing the alternative.

Type of Impact. **Adverse** impacts are those that most visitors would perceive as undesirable. **Beneficial** impacts are those that most visitors would perceive as desirable.

Impacts from Implementing Alternative A

Visitor services would remain minimal and less than was available prior to Hurricane Katrina. This would result in a **Major, Long-term Adverse** impact to the visitor experience.

Impacts Common to Both Action Alternatives

During construction of either action alternative the temporary modular VC would have to be closed and removed. During construction of the new building there might be limited or non-existent opportunities for visitor use of VC facilities. This interruption of services would be for less than one year, and would therefore constitute a **Moderate, Short-term Adverse** impact of short term duration.

Impacts from Implementing Alternative B

Visitor services would be able to return to pre-hurricane levels, with minor improvements to VC design and programs possible. This would result in a **Moderately Beneficial Long-term** impact to visitor use and experience.

Impacts from Implementing Alternative C

Visitor services would exceed pre-hurricane levels, with major improvements to VC design and an expansion of programs and opportunities. This would result in a **Major and Beneficial Long-term** impact to visitor use and experience.

Conclusion. Alternative A would lead to **impairment** of park resources or values related to visitor use and experience. Alternatives B and C would provide more visitor opportunities for learning about the War of 1812 and the Battle of New Orleans and cultural history of the site. The overall cumulative impacts

would be long term, minor, and beneficial. Consequently, there would be no impairment of park resources or values related to visitor use and experience as a result of the implementation of Alternatives B or C.

NPS OPERATIONS

Methodology

The impact analysis evaluated the effects of the alternatives on the following aspects of NPS operations: staffing, infrastructure, visitor facilities, and services.

The analysis was conducted in terms of how NPS operations and facilities might vary under the different management alternatives. Professional judgment was used to reach reasonable conclusions as to the intensity, duration, and type of potential impact.

Duration of Impact. Short term impacts would be less than one year. Long term impacts would extend beyond one year and have a permanent effect on operations.

Intensity of Impact.

Minor — The effects would be detectable, but would be of a magnitude that would not have an appreciable effect on NPS operations.

Moderate — The effects would be readily apparent and would result in a substantial change in NPS operations in a manner noticeable to staff and the public.

Major — The effects would be readily apparent and would result in a substantial change in NPS operations in a manner noticeable to staff and the public and be markedly different from existing operations.

Type of Impact. ***Beneficial*** impacts would improve NPS operations and/or facilities. ***Adverse*** impacts would negatively affect NPS operations and/or facilities and could hinder the staff's ability to provide adequate services and facilities to visitors and staff. Some impacts could be beneficial for some operations or facilities and adverse or neutral for others.

Impacts from Implementing Alternative A

Failure to replace the VC would mean that NPS operations would continue to be impaired for lack of adequate space and adequate facility design. This would result in a ***Major Long-term Adverse*** impact to NPS operations.

Impacts from Implementing Alternative B

Replacement of the VC in kind would result in a return to a pre-hurricane level of NPS operations with only minor improvements resulting from better space utilization and environmental design. The new building would be designed to

incorporate environmental features that promoted energy efficiency and cost savings. The impact on NPS operation would be ***Moderate and Beneficial Long-term***.

Impact from Implementing Alternative C

A larger VC would allow an expansion of visitor services, program opportunities, office space, and storage. The new building would be designed to incorporate environmental features that promoted energy efficiency and cost savings, though a larger building would be more costly to maintain and operate. The impact on NPS operations would be ***Major and Beneficial Long-term***.

Conclusion. **Alternative A** would lead to **impairment** of park resources or values related to NPS Operations. Alternatives B and C would provide improved NPS operational capabilities. The overall cumulative impacts would be long term, major, and beneficial. Consequently, there would be no impairment of park resources or values related to NPS operations as a result of the implementation of Alternatives B or C.

OTHER IMPACTS

Unavoidable Moderate or Major Adverse Impacts

Alternatives A, B, and C would result in no unavoidable moderate or major adverse impacts on park resources or visitor enjoyment.

Irreversible and Irretrievable Commitments of Resources

Alternative C – Implementing this alternative would result in the irretrievable loss of some vegetation and soil productivity due to construction of facilities.

Relationships Between Short Term Uses of the Environment and the Maintenance and Enhancement of Long Term Productivity

The primary purpose of Chalmette is to preserve the site of the Battle of New Orleans and to interpret and educate visitors on the Battle of New Orleans and the War of 1812. In addition, other historic uses and features of the site are preserved and interpreted. NPS manages these areas to maintain natural ecological processes, while promoting and supporting cultural resources and visitor experience. Any actions NPS staff would take would be intended to ensure that human uses do not adversely affect the cultural resources or productivity of existing biotic communities.

Alternatives B and C would result in a minimal amount of new development and would have a low potential for reducing long term natural productivity.

Environmentally Preferred Alternative

In accordance with DO-12, the NPS is required to identify the “environmentally preferred alternative” in all environmental documents, including EAs. According to CEQ guidelines, the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in Section 101 of NEPA, which considers:

1. fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations;
2. assuring for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
3. attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
4. preserving important historic, cultural and natural aspects of our national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice;
5. achieving a balance between population and resource use that will permit high standards of living and a wide sharing of life’s amenities; and
6. enhancing the quality of renewable resources and approaching the maximum attainable recycling of depletable resources (NEPA, section 101).

Alternative C—Replace VC on a new expanded footprint in an adjacent location is the **NPS preferred alternative** (Figure 4). This alternative would have no adverse effect on the cultural landscape, but would result in a major and positive effect on the socioeconomic environment and major beneficial effects on visitor use and experience and NPS operations. There would no impairment of park resources, and no major long term or irretrievable effects on the environment. The temporary modular VC which is causing a short term adverse effect on the cultural landscape and could potentially lead to an impairment of park resources would be removed. Replacing the VC now with an appropriately designed and sized structure will forestall the need for resizing or redesign to replace or improve a smaller VC should the ongoing GMP process recommend that future action.



Figure 4. Illustration of the environmentally preferred alternative.

This is the ***environmentally preferred alternative*** because it achieves the best balance between NPS mission objectives to provide safe, healthful, productive and esthetically and culturally pleasing surroundings for visitors with the widest range of beneficial uses without degradation of the cultural or natural environment.